Today many health charities meet their research needs with exclusively non-animal research methods. Animal research does not work because every species of animal is different biomechanically and biochemically. Non-human animals are different not only from humans, but also from each other anatomically, physiologically, immunologically, genetically and histologically. Animal research not only hurts and kills animals, it kills humans too. For example, the drugs thalidomide, Zomax, and DES were all tested on animals and judged safe but had devastating consequences for the humans who used them. A General Accounting Office report, released in May 1990, found that more than half of the prescription drugs tested on animals and approved by the Food and Drug Administration between 1976 and 1985 caused side effects that were serious enough to cause the drugs to be withdrawn from the market or relabeled.

The use of human or animal cell lines could reduce the number of animals utilized in testing as much as 30 percent. Now modified by three more humane alternatives, only eight to 12 rodents are needed to estimate lethal dose. The National Institute of Environmental Health Sciences has released two new federal interagency reports on alternative testing methods which could slash the number of animals killed even further. Cell lines may one day replace much animal testing, but <u>even</u> today cells grown in cultures can be used to screen chemicals for their relative toxicity, reducing the need for animals by almost a third.

The Organization for Economic Cooperation and Development (OECD), an international trade group that includes several European countries, Japan and the U.S., is removing the old LD50 test from its guidelines. Within a year of final OECD approval, the older animal intensive LD50 method can be replaced by the regulatory agencies of the member governments with tests using fewer animals. This official, international switch to the new tests is expected in the latter months of 2002.

Dr. Albert Sabin, who developed the oral polio vaccine, testified at a congressional hearing: "[p]aralytic polio could be dealt with only by preventing the irreversible destruction of the large number of motor nerve cells, and the work on prevention was delayed by an erroneous conception of the nature of the human disease based on misleading experimental models of the disease in monkeys" (Stoller, Kenneth, M.D., "Animal Testing: Why a Doctor Opposes It," The Orlando Sentinel, June 25, 1990.).

There are sophisticated non-animal research methods that are accurate, more cost-effective, and less time-consuming than animal research. Such non-animal research methods include: epidemiologic studies (or comparative studies of human populations), clinical research, in vitro research, computer modeling, safety tests using human cells, and medical applications, to name just a few. These methods have contributed to many advancements in medicine by providing important information about smoking and cancer, cholesterol and heart disease, high-fat diets and common cancers, *chemical exposures* and birth defects, the mechanism of transmission of AIDS, abnormalities in the brains of victims of Alzheimer's disease, schizophrenia, epilepsy, and autism. The AIDS virus was isolated in human serum, and in vitro methods are providing new insights into the virus' effect on human cells.

Non-human animals are not research tools. They are individuals capable of experiencing not only crude emotions like fear, but far more subtle and complex emotions such as love, grief, pride, shame, joy, and loneliness. The cognitive psychologist, Bernard Baars stated, "The basic facts have come home at last. We are not the only conscious creatures on earth." Charles Darwin's theory of natural selection proved that human beings are in fact animals and, as such, they evolve according to the same evolutionary dynamics as non-human animals. Therefore, humans have the moral obligation to treat animals with respect and dignity.

People have evolved much these last hundred years. We have finally come to see the need to salvage all that we can of what is left of this lifeboat Earth if we are to survive at all. And we are beginning to see that everything upon the Earth is inter-related, inter-connected, inter-dependant. Unfortunately, we have not always understood in time to prevent great irreparable, irreplaceable losses. One of the most urgent losses that we face in today's overcrowded, fast paced world is compassion. I urge you, as a Steward of this Country, to do all that is within your power to replace lethal dose testing with non-animal, in vitro testing methods.

Sincerely,

Arleen S. Wiley